DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

AUG - 1 2001

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
SERVICE ACQUISITION EXECUTIVES
ASSISTANT SECRETARY OF DEFENSE, SPECIAL
OPERATIONS AND LOW-INTENSITY CONFLICT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTOR, JOINT STAFF

SUBJECT: Policy for Land Mobile Radio (LMR) Systems

This attached policy applies to all DOD CINC, Service and Agency (C/S/A) Land Mobile Radio (LMR) systems and equipment acquisitions, system improvements or expansion, and system replacements. This policy covers all Military LMR fixed and mobile assets worldwide.

The objective of this policy is to ensure that DOD LMR systems will be acquired with appropriate consideration of (1) timely and cost effective migration to mandated narrowbanding requirements, (2) achieving interoperability as required to meet the mission, (3) meeting security requirements, and (4) minimizing procurement and support costs.

Meeting the National Telecommunications & Information Administration (NTIA) narrowbanding mandate for the United States and its Possessions (US&P) in the years 2005 and 2008 is a paramount concern. The DOD Capital Investment Plan of October 1998 provided initial guidance and responsibilities for meeting this mandate.

Each C/S/A shall submit a plan to the Assistant Secretary of Defense (C3I) to meet the NTIA narrowbanding mandate, including a funding strategy, within two weeks after submission of the Services FY03 Amended Program Objective Memorandum (APOM). These plans shall reflect procuring new LMRs, modifying existing LMRs, outsourcing LMRs, or outsourcing/procuring alternative systems. Procurements shall be consolidated as much as practical to reduce costs.

The enclosed policy is necessary to meet the time schedule for implementing the NTIA mandate and provide DOD users with fully interoperable LMR systems. It is requested that this memorandum receive widest dissemination.

Request the Director, Joint Staff forward this memorandum to the Commanders-in-Chief for appropriate action.

Please direct any questions to the Director, Communications, Command and Control (C3) in the Office of the Deputy Assistant Secretary of Defense (C3ISR) at (703) 607-0270.

Attachment
As stated

cc:
USD (AT&L)
JCS (J-6)
DISC4
CNO N-6
DASN (C4I/EW/Space)
DIRECTOR, HQ COMM & INFO (AF/SC)
DIRECTOR, C4 USMC
JTRS JPO
DIRECTOR, OSAM

POLICY FOR
LAND MOBILE RADIO (LMR) SYSTEMS

REFERENCES:

(a) NTIA Manual of Regulations and Procedures for Federal Radio Frequency Management, January 2000, with May/Sept 2000 revisions.

(b) Joint Tactical Radio System (JTRS) Operational Requirements Document (ORD) Revision 2.2, 30 January 2001

(c) *National Security Telecommunications and Information Systems Security Policy* (NSTISSP) No. 11, Subject: National Policy Governing the Acquisition of Information Assurance (IA) and IA-enabled Information Technology (IT) Products

(d) Department of Defense Chief Information Officer Guidance and Policy memorandum No. 6-8510 "Department of Defense Global Information Grid Information Assurance, dated 16 June 2000

1. Purpose. To promulgate policy regarding procurement of Land Mobile Radios (LMRs). The objectives of this policy are to (1) ensure timely, cost effective, and coordinated compliance with the narrowbanding mandates of reference (a); (2) promote interoperability among LMRs where required; (3) clarify security requirements; and (4) minimize Department-wide life cycle cost of LMRs.

2. Definitions.

a. Land Mobile Radio. A radio, which operates in a frequency band, designated for mobile communications by the US National Table of Frequency Allocations. LMRs are typically line-of-sight, handheld or vehicular radios providing netted conventional two-way or trunked, voice and data communications. LMRs are used in garrison, aboard ship (considered in garrison for the purposes of this policy), and at deployed sites.

b. Levels of Robustness. LMRs will operate at one of three levels of robustness depending upon their function. Levels of robustness defined by reference (d) can be characterized by the need for and strength of an Information Assurance measure (e.g. confidentiality), mechanism (e.g. encryption), and the assurance or confidence that the measure is implemented and operating correctly. Reference (d) defines three levels of IA robustness: 1) Basic - that equates to good commercial practice; 2) Medium - that requires additional robustness as determined by the mission category and/or information sensitivity; and 3) High - that is typically required for protection of classified information and mission critical systems. Independent of the levels of robustness, all products must be evaluated in accordance with reference (c).

c. Tactical LMR. An LMR which is intended for mission critical applications and use in combat or other tactical applications requiring high robustness, the highest level of security and possibly anti-jam or Low Probability of Intercept/Low Probability of Detection (LPI/LPD) features.

d. Non-tactical LMR. All other LMRs used for administrative and mission support functions. Non-tactical LMRs are typically used for garrison security, emergency response, logistics, and maintenance. Depending on the mission definition these LMRs could require basic or medium levels of robustness.

e. Deployable LMR. An LMR that could be tactical or non-tactical and intended for use in locations outside garrison and US&P.

f. Non-deployable LMR. Typically non-tactical, an LMR intended for use only in garrison, in the United States and Possessions (US&P) or elsewhere.

g. Narrowband Operation. For the purposes of this policy, narrowband operation means operation in a 12.5 KHz bandwidth channel as defined by the NTIA in reference (a).

h. LMR Alternative Technologies. For the purpose of this policy, LMR alternative technologies means wireless communications services and systems that offer opportunities for meeting communications requirements without using spectrum mandated for narrowbanding per reference (a) (such as Mobile Subscriber Services (MSS), cellular phone cellular broadcast, pager services, etc.).

3. Policy

a. Narrowband Operation. All LMRs operating in the US&P in frequencies subject to the NTIA narrowbanding mandates of reference (a) must comply with the mandates by the specified dates. NTIA requires these radio systems to operate in a channel one-half the size of that currently being used (12.5 KHz vice 25 KHz). After January 1, 1995, any new system, and after January 1, 2005, all systems in the 162 - 174 MHz band must conform to these requirements. After January 1, 1995, any new system, and after January 1, 2008, all systems in the 406.1 - 420 MHz band must conform to these requirements. After January 1, 1998, any new system, and after January 1, 2008, all systems in the 138 - 150.8 MHz band must conform to these requirements. In addition, new LMR radios or services procured after the promulgation date of this memorandum that operate in the 380 – 399.9 MHz band (which is not subject to the NTIA mandate) shall nevertheless be designed for narrowband (12.5 KHz) operation in order to make efficient use of available spectrum. LMRs intended for use in locations outside US&P shall conform to host nation requirements.

b. Use of Government Bands. New non-tactical LMR radios or services procured after the promulgation date of this memorandum and intended for use in the US&P shall be designed to operate in frequency bands designated primarily for federal government use (i.e. 138-144, 148-149.9, 150.05-150.8, 162-174, 380-399.9 MHz and 406.1-420 MHz. The 380-399.9 MHz band is limited to military use only). Waivers to this requirement must be approved in advance by the Military Communications-Electronics Board (MCEB) Frequency Panel and the Service Frequency Management Office. This does not preclude use of LMR alternative technologies.

c. JTRS Compliance. Tactical LMRs are considered a member of the Joint Tactical Radio System (JTRS) family and shall be procured through the JTRS program, in accordance with approved Service JTRS migration plans. Non-tactical LMRs are exempt from JTRS compliance. Procurement of non-tactical LMRs that are compliant with the JTRS Software Communications Architecture is encouraged.

d. Association of Public Safety Communications Officials (APCO Project 25) Compliance. New LMR radios or services procured after the promulgation date of this memorandum and intended for use in the US&P shall comply with the APCO Project 25 standard. The primary objectives of APCO Project 25 are to: (1) enhance functionality of equipment and capabilities focused on public safety needs, (2) ensure competition among multiple vendors through Open System Architecture and (3) achieve effective, efficient and reliable intra-agency and inter-agency communications.

e. Cryptographic Security. In accordance with reference (b), all Tactical LMRs require NSA Type I high robustness security using NSA-certified cryptography. In addition, those non-tactical LMRs likely to be used for communicating classified information also shall meet high robustness requirements with NSA-approved security capability. Non-tactical LMRs likely to be used for communicating Sensitive But Unclassified (SBU) information shall meet medium or basic robustness, depending on the application environment, and shall comply with reference (c), which requires that, when COTS security products are procured, preference shall be given to products which have undergone a standardized evaluation process described in the reference. After 1 July 2002, such evaluation is mandatory. Levels of robustness are defined in reference (d).

f. Interoperability and Other Requirements. Tactical LMR requirements for functional capability, including interoperability with other radios, are defined by reference (b). If there is a requirement to deploy non-tactical LMRs, the operational requirements, including frequency band and operating standards, will be specified, coordinated, and/or approved by the local commander (C/S/A) in whose operating area the LMRs will deploy and operate. Frequency authorization will be coordinated with the appropriate DOD Area Frequency Coordinator (AFC). Non-deployable LMRs should be interoperable with other Service LMR solutions when located within the same geographic region. Agreements with state and local government should result in interoperable solutions that meet NTIA requirements.

g. Spectrum Certification and Frequency Assignment Approval. The procuring agent shall ensure that these requirements have been satisfied prior to procurement of new radios.

h. Centralized Oversight of Acquisition. CINCs, Services and Agencies shall oversee LMR acquisitions at a central point, in order to encourage economic order quantities and other benefits of consolidated procurement. Centralized procurement of LMR or alternative systems, and acquisition of leased systems or outsourcing, is encouraged where feasible.

i. Coordination of Migration to Narrowband Operation. Migration of LMR systems to narrowband operation shall be coordinated among DOD Services/activities and, with other Federal departments and agencies in accordance with normal NTIA policy and procedures, in order to minimize mutual interference and retain needed interoperability.

j. Waivers. Request for waiver to these policies should be submitted to ASD(C3I) via the MCEB Frequency Panel.

k. LMR Alternative Technologies. LMR alternative technologies that offer reductions in cost, opportunities for enhanced capabilities, or improved interoperability are encouraged. Emerging wireless systems, including commercial services, give DOD several viable alternatives to consider in meeting LMR type requirements. Alternative technologies shall be taken into account when finalizing plans for future narrowband radio systems.